

February 15, 2013

Summary of Cucamonga Creek as described in January 12, 2012 Staff Report Section 5.6.6. [UAA Analysis Cucamonga Creek](#) and [CDM UAA Technical Report for Cucamonga Creek](#)

[Note: The Regional Board staff report UAA sections utilize, in part, technical information presented in the CDM UAA technical report for each of the UAA waters. To the extent feasible, the technical information in the CDM reports was summarized/reiterated in the Regional Board staff reports to minimize the need for readers to review both reports. However, the CDM reports include additional photographs and figures that were not included in the Regional Board staff reports because of file size considerations. These additional photographs/figures are referenced as needed in the Regional Board staff reports, and in the summary below.

To avoid confusion, please note further that in some cases, the reach designations differ slightly between the Regional Board reports and CDM's reports. (Regional Board staff recommended slight revisions of CDM's approach, which was initiated first, based on review of applicable data and information.) References in the summary below to figures in the CDM reports as applicable to specific reaches are based on the Regional Board's reach designation scheme.]

Summary of UAA Cucamonga Creek (Continued)

Cucamonga Creek	REC1	REC2	40 CFR 131.10(g) Factors	
			131.10(g)(2) Low Flow	131.10(g)(4) Hydrologic Modifications
Reach 1	u	u	Depth <2ft 98% of time; <1.5ft 93% of time 5 inches deep at most downstream section at Hellman Ave as observed by RB staff on February 2, 2011. Observed channel to be dry at most upstream section, RB staff in May 2011.	Concrete vertical wall (~12-15 ft height) channel 11 miles in length. Concrete trapezoidal channel (2:1 side slope) 4 miles in length.
Representative Photographs				
Reach 1	See Figures CC-5, CC-6, CC-7, CC-8, CC-9, CC-13, CC-20 UAA Analysis CC. See Figures 2-8, 2-9 of the CDM UAA Technical Report, CC.			

u REC1 and/or REC2 are not attainable uses as determined by UAA.

Summary of UAA Cucamonga Creek (Continued)

Nature of Flows

6see Section 5.6.6 UAA Analysis Cucamonga Creek: 5.6.6.4 “Flow Conditions and Water Levels”)

Reach 1	Low flows consist of treated POTW effluent (tertiary treated) and urban nuisance flows
----------------	---

Water Quality Conditions

(See Section 5.6.6 UAA Analysis Cucamonga Creek: 5.6.6.7. “Water Quality Conditions” and Appendix 1)

Water quality data show that there has been no consistent compliance with REC1 objectives

Evidence of Use Investigations

(See Section 5.6.6 UAA Analysis CC: 5.6.6.8 “Recreation Use Surveys”)

1. Field Observation:

- a. **SQSTF member surveys: July/August 2006 and July/August 2011.**
 - i. **No REC 1 or REC 2 activity observed.**
- b. **Channel maintenance personnel communications**
 - i. **No REC 1 or REC 2 activity reported.**
- c. **Weekly observations made in coordination with remote camera maintenance**
 - i. **No REC 1 or REC 2 activity reported**

Summary of UAA Cucamonga Creek (Continued)

2. Photographic Evidence:

(Table below excerpted from Section 5.6.6. UAA Analysis CC)

**Table TC-4
Recreation Use Survey Duration and Number of Images Collected**

Survey Location	Start Date	End Date	Number of Images
Hellman Avenue Upstream	11/1/2005	11/1/2006	2,546
Hellman Avenue Downstream*	7/26/2005	11/1/2006	17,678
RP1, facing upstream	10/2/07	10/10/08	27,122

*Note that the Hellman Avenue Downstream survey location is not included in the recommendations for REC beneficial use changes based on this UAA analysis

(Table below excerpted from Section 5.6.6 UAA Analysis Cucamonga Creek)

**Table CC-3
Recreational Activity Recorded for the Cucamonga Creek**

Location	Number of Individuals			Estimated Duration (min)	Type of Activity
	Total	Dry Season	Wet Season		
Hellman Avenue Upstream	1	1	0	30	Vehicle Driving in Water
Hellman Avenue Downstream*	35	21	14	1,080	Walking, horseback riding in water
RP-1 upstream at RP1	0	0	0		

*Note that the Hellman Avenue Downstream survey location is not included in the recommendations for REC beneficial use changes based on this UAA analysis

Conclusion: No photographic evidence of REC1 or REC2 activity in Cucamonga Creek, Reach 1. Vehicle photographed in channel (Figure CC-21) likely County Flood Control Department.

Control Measure Implementation

- 1) Established Regulatory Framework:
 - a) MS4 permit (and general statewide industrial/construction permits) for San Bernardino County. Includes:
 - i) Requirements include investigations to identify/correction of illicit connections to the MS4 system.
 - ii) BMP implementation (including education, street sweeping, LID, etc.)
 - b) Requirements based on Middle Santa Ana River Pathogen TMDL:
 - i) WQBELs based on TMDL WLAs:
 - (1) TMDL/MS4 permit require compliance by specified interim/final deadlines; MS4 permittees on track to achieve compliance
 - (a) Compliance contingent, in part, on approval of recreation standards amendments
 - ii) Develop and implement bacteria indicator urban source reduction plans:
 - (1) Monitoring program (ongoing implementation)
 - (2) Urban source evaluation plan (ongoing implementation)
 - (3) Comprehensive Bacteria Reduction Plan (CBRP): (ongoing implementation)
 - (a) Implement non-structural BMP activities: conduct Tier 1 source evaluation (including microbial DNA source tracking for human sources)
 - (b) Prioritize MS4 drainage areas based on findings of Tier 1 source evaluations
 - (c) Identify alternatives for reducing or eliminating controllable urban flow or bacterial indicator sources from MS4 outfalls
 - (d) Identify structural BMP solutions, where non-structural BMPs are insufficient
 - (e) Complete UAAs where appropriate to guide placement of structural BMP solutions
 - (f) Construct structural BMP

See

http://www.waterboards.ca.gov/santaana/water_issues/programs/stormwater/docs/sbpermit/cbrp/SBC_CBRP_6-28-2011.pdf; staff report re approval of CBRPs for San Bernardino (and Riverside) counties:
http://www.waterboards.ca.gov/santaana/board_info/agendas/2012/02_10/02-10-2012_item_11.pdf

2) A regional structural BMP treatment system will be constructed later this year. Low flows will be diverted from the downstream terminus of Cucamonga Creek Reach 1 into a series of wetlands and then back into the Creek (known as Mill Creek downstream of Reach 1). Responds directly to UAA results for Reach 1 and need to protect downstream REC1 use.

3) Discharged POTW effluent is tertiary treated (to provide essentially pathogen-free effluent), including disinfection to meet California Department of Public Health's recommendations to protect public health and primary contact recreational use.

Other Factors Considered

1) Access and Safety (Section 5.6.5 UAA Analysis CC, 5.6.5.5)

a) Reach 1: All fenced; maintenance access gates locked.

b) Reach channel walls trapezoidal and vertical.

i) Channel considered unsafe for public access

2) Adjacent Land Use (Section 5.6.6 UAA Analysis CC, 5.6.6.6; Figure CC-14):

a) Reach 1: Predominately agricultural, industrial and commercial/service in downstream sections and residential in most upstream section (where channel has vertical walls).

In addition to the results of field and photographic surveys, adjacent land use, channel morphology, accessibility and fencing or other barriers to viewing the channel (such as vegetative cover) were considered in recommendations regarding REC2 designations. Based on this evidence, de-designation of REC2 was found appropriate. Much of the Reach runs through an agricultural area with limited public access or visibility; access/visibility is also limited in commercial/industrial and residential areas adjacent to the vertical-walled channel. Channel morphology severely limits wildlife habitat and viewing opportunities. Of the 29,668 photographic images captured for Reach 1, there were no observations of people in or near the channel (apart from a vehicle, which may have been a county flood control maintenance vehicle.)

Summary of UAA Cucamonga Creek (Continued)



Figure CC-5. Reach 1. Photo REC Survey Location; looking upstream at Hellman Avenue. REC 1 and REC 2 are not attainable in Reach 1. (UAA Analysis CC)
Figure 2-8. Reach 1. (CDM UAA Technical Report CC)





Figure CC-21, Reach 1: Photo REC Survey Location; only photo of individual (presumably driving the vehicle in distance) in Reach 1. (UAA Analysis CC)



Figure CC-6. Reach 1 looking upstream. Eleven miles of the total 15 mile length of Reach 1 is contained by concrete vertical walls at 12-15 ft in height. (UAA Analysis CC)

Summary of UAA Cucamonga Creek (Continued)



Figure CC-7. Reach 1, looking at upstream terminus (Cucamonga Canyon Dam) of Reach 1.

Summary of UAA Cucamonga Creek (Continued)



Figure CC-13. Reach 1, showing locked gate, fencing, and no trespassing/warning sign. The entire Reach is fenced with locked gates and posted to keep individuals out. All of the UAA waters are fenced and posted in a similar fashion to prohibit access.